

ATTACHMENT F:
EXAMPLE STAFF ACTIVITY REPORT

The attached *example* staff report was for a simple process subject to the federal Prevention of Significant Deterioration (PSD) regulations. The level of detail and the length of a staff report prepared for an expedited permit review pursuant to this operational memorandum should be commensurate with the type, size and complexity of the source being permitted. The general format and basic concepts should be the same.

Additional examples of staff reports can be viewed on the AQD's Internet home page at the following address: **<http://www.deq.state.mi.us/aqd>**. All staff reports are also downloadable from the home page in WORD 6.0 format. An electronic version of a specific staff report is available, upon request, via E-MAIL.

EXAMPLESTATE OF MICHIGAN
JOHN ENGLER, Governor**MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY**

RUSSELL J. HARDING, Director

AIR QUALITY DIVISIONHOLLISTER BUILDING, PO BOX 30260, LANSING MI 48909
INTERNET: <http://www.deq.state.mi.us/airq>**STAFF ACTIVITY REPORT**

December 7, 1998

ApplicantANR Pipeline Company
3372 Browntown Road
Bridgman, Michigan

Permit to Install Application No. 4-98

Purpose and Summary

The Michigan Department of Environmental Quality (MDEQ), Air Quality Division (AQD) will be acting on a permit application, No. 4-98, for the proposed construction of a new natural gas fired turbine for their existing natural gas compressor station. This proposed turbine is subject to permitting requirements pursuant to the MDEQ's Rules for Air Pollution Control. Prior to acting on this application, the AQD is holding a 30-day public comment period and a public hearing, if requested, to allow all interested parties the opportunity to comment on the proposed turbine. All relevant information received during the comment period and hearing will be considered by the decision-maker prior to taking final action on the application.

Significant Dates

January 2, 1998	Application received.
July 8, 1998 through November 6, 1998	Additional information received.
November 6, 1998	Applicant accepted the draft conditions.
December 1998	Estimated time when installation begins.

Site Location and Present Air Quality

The new proposed turbine would be located at the existing natural gas compressor station located at the address above. Figure I shows the location of this station. (Note: This Figure is not actually included in this example staff activity report. Typically this would be included as the last page of the report).

Staff Activity Report
ANR Pipeline Company
Page 2
December 7, 1998

The area is designated as an attainment area for all of the criteria pollutants. The criteria pollutants are particulate matter less than ten microns in diameter (PM-10), sulfur dioxide (SO₂), nitrogen dioxide (NO₂), carbon monoxide (CO), ozone and lead.

Applicable Regulations

The proposed turbine will be a major modification at an existing major stationary source as defined in the federal Prevention of Significant Deterioration (PSD) regulations (40 CFR 52.21) due to the potential emissions of PM-10, CO, NO₂ and volatile organic compounds (VOC). The federal New Source Performance Standards (NSPS) rules will also apply to the new turbine (see 40 CFR 60, Subpart GG). The turbine will also be subject to the MDEQ's regulations and requirements as specified in Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended.

The applicable rules are listed in Exhibit I.

Control Technology Review

The PSD rules require best available control technology (BACT) for controlling emissions of CO, NO₂ and VOC.

The applicant performed a top-down BACT analysis. The emission limits specified in the attached draft set of conditions reflect the level of control that represents BACT. Staff reviewed the United States Environmental Protection Agency's (EPAs) BACT/lowest achievable emission rate (LAER) Clearinghouse for similar sources that have been recently issued PSD permits. The emission limits proposed by the applicant are consistent with those listed in the Clearinghouse.

Air Quality Impact Analysis

The proposed maximum allowable hourly and annual emission rates from the proposed turbine are summarized in the following table. The annual emissions are based on an operating schedule of 24 hours per day and 365 days per year.

Pollutant	Pounds/Hour	Tons/Year
PM-10	5.0	22.0
Nitrogen Oxides	17.1	74.9
Carbon Monoxide	29.8	130.5
Volatile Organic Compounds	17.0	74.7

Staff has completed their review of the applicant's modeling demonstration. The results indicate that the proposal will comply with the federal National Ambient Air Quality Standard (NAAQS) and PSD increments of deterioration.

Staff Activity Report
ANR Pipeline Company
Page 3
December 7, 1998

Additional Department Approvals

No other Department approval(s) is needed for this new turbine.

Conclusions

Based on the analysis conducted to date, staff concludes that the proposed turbine would comply with all MDEQ's AQD regulations based on the applicant's proposed emission limitations. It is also staff's conclusion that this source as proposed would not violate the federal NAAQS nor the federal PSD increments. Based on these conclusions, staff has developed draft permit terms and conditions attached to this staff report, which would assure that the proposed turbine design and operation are enforceable and that sufficient monitoring, recordkeeping and reporting would be performed by the applicant to determine compliance with these terms and conditions. If the permit application is deemed approvable, the delegated decision-maker may determine a need for additional or revised conditions to address issues raised during the public participation process.

Public Participation

The MDEQ is holding a public comment period of at least 30 days and a public hearing, if requested, on the permit application. The public comment period and hearing are being held to solicit written and verbal comments prior to taking any action on the permit application. The delegated decision-maker will consider all comments received.

Staff Activity Report
 ANR Pipeline Company
 Page 4
 December 7, 1998

EXHIBIT I
APPLICABLE REGULATIONS

Rule/Regs.	Description of Requirements	Action Taken	Conditions *
PSD	BACT must be implemented for each pollutant that is emitted in significant quantities.	Applicant has performed a BACT analysis for PM-10, CO, VOC and NO ₂ .	SC 1, 2, 3, 4
PSD	A modeling study must be done to verify that the impact(s) will not cause or contribute to a violation of any NAAQS, nor exceed any applicable of deterioration for SO ₂ and NO ₂ .	Applicant has provided an acceptable demonstration.	N/A (Not Applicable)
PSD	A preconstruction ambient monitoring program to determine the level of air pollution at the proposed site. However, there is an exemption from the preconstruction monitoring program if it can be demonstrated that, through a screening model, the impacts would be below significant levels in the PSD rules.	Applicant has provided an acceptable demonstration.	N/A
PSD	A demonstration that the emissions as a result of the proposed equipment will not cause unacceptable secondary impacts, such as visibility impairment.	Applicant has provided an acceptable demonstration.	GC 7
PSD	A demonstration that, as a result of the new proposed equipment, growth due to increased residential, commercial and industrial expansion will not cause unacceptable secondary air quality impacts.	Applicant has provided an acceptable demonstration.	GC 7

Staff Activity Report
 ANR Pipeline Company
 Page 5
 December 7, 1998

EXHIBIT I
APPLICABLE REGULATIONS (Continued)

Rule/Regs.	Description of Requirements	Action Taken	Conditions *
PSD	A public comment period, and hearing if requested, to allow all interested parties the opportunity to comment on the proposed facility.	The AQD is holding a 30-day public comment period and public hearing, if requested.	N/A
NSPS	Subpart GG contains limits for visible emissions and nitrogen oxides. These regulations also contain monitoring, reporting and record keeping requirements.	Applicant has agreed to fulfill all of these requirements.	GC 12, SC 1, and 7
201	Requires a source to obtain an approved Permit to Install prior to the installation or modification of process and control equipment.	Applicant has submitted a permit application to AQD.	GC 1, 2, 3, 4, and 5
230	Requires BACT and limits the emission impact of toxic air contaminants to less than the applicable screening levels.	The use of modern combustion technology inherently controls the emission of toxic air contaminants from natural gas combustion.	N/A
301	Limits visible emissions from the equipment to 20 percent opacity, or a level specified in the Permit to Install.	Applicant has agreed to meet the levels specified in the attached proposed conditions.	GC 12

Staff Activity Report
 ANR Pipeline Company
 Page 6
 December 7, 1998

EXHIBIT I
APPLICABLE REGULATIONS (Continued)

Rule/Regs.	Description of Requirements	Action Taken	Conditions *
702	Requires BACT for new sources of VOC.	The use of modern combustion technology inherently controls the emission of VOC from natural gas combustion.	N/A
901	Prohibits the emission of an air contaminant from the proposed process equipment which may cause injurious effects to human health and welfare, or prevent the comfortable enjoyment of life and property.	Staff considers that the use of natural gas in a modern turbine will inherently result in compliance with this rule.	GC 7
912	Requires a source to notify the MDEQ if an abnormal condition arises which causes the emission of an air contaminant that exceeds the allowable emission rate in a rule and/or Permit to Install.	Applicant has agreed to report all exceedances of the allowable emission rates.	GC 8
Part 10	Allows AQD to request a source to test the emissions of air contaminants and to approve the protocol to be used for these tests.	Applicant has agreed to test and monitor all applicable pollutants.	GC 15, SC 5 and 6

* The general (GC) and special conditions (SC) of the permit which ensure compliance with the applicable rule or regulation.